TRANSACTIONS

OF THE

NEW YORK SURGICAL SOCIETY.

Stated Meeting, October 28, 1908.

The President, Dr. Joseph A. Blake, in the Chair.

STAB-WOUND OF THE LIVER.

Dr. Forbes Hawkes presented a man, 50 years of age, who on August 19, 1908, was stabbed in the abdomen just below the right costal border at the outer edge of the rectus muscle. He was brought to the Presbyterian Hospital a few hours after the injury. He then presented slight dulness in both flanks, some suprapubic dulness and marked rigidity of the right rectus muscle, especially at its upper part. There was slight abdominal distention.

Exploratory laparotomy in the mid-epigastric region revealed the abdominal cavity full of dark blood, and a stab-wound of the liver just above the gall-bladder, about three-quarters of an inch long by half an inch deep. The liver was bleeding freely through this rent. Dry gauze pressure was used for a few minutes; then a suture of plain catgut was inserted, approximating the edges of the rent in the liver. This entirely arrested the bleeding. A rubber tissue and gauze cigarette-drain was inserted through the laparotomy wound to the wound in the liver. The pelvis was drained through a small suprapubic opening. The original stab-wound was drained with gauze, and the patient was placed in Fowler's position. He made an excellent recovery.

CYST OF THE SUPRARENAL GLAND.

Dr. John A. Hartwell presented a woman, 37 years old, who was admitted to Bellevue Hospital, on August 17, 1908. Her family history was excellent. The patient gave a history of

having had typhoid fever about twenty years ago and subsequently an attack of malaria. She was not alcoholic. Menstruation was normal and she was the mother of seven healthy children.

Present History.—Two years ago, while being examined during a pregnancy, the patient was told that she had a large mass in the upper left side of the abdomen. She had never noticed this before and it had caused her no trouble. Following this confinement, she began to have pain in the abdomen at the site of the mass; this was of a shooting character, coming on intermittently. The pain increased, and was worse on exertion, particularly on flexing the abdomen. The patient had lost considerable weight during the past three months. Her appetite was poor and she had frequent attacks of vomiting. Constipation was pronounced. There were no urinary symptoms, and aside from the presence of the tumor and some loss of weight and strength, there were no symptoms referable to the tumor, unless possibly the rather obstinate constipation could be attributed to it.

Physical Examination.—The patient was a rather spare woman, showing evidence of hard work, but not looking especially ill. Her general appearance gave no evidence of malignant disease. The thoracic viscera were found to be normal.

An examination of the abdomen revealed a tumor which was believed to be the spleen, although this was not positive. It was located to the right and just below the umbilicus, and had a rather marked excursion on a pedicle lying in the normal splenic region. The mass was about half as large again as the normal spleen, and revealed the splenic notch, though very indistinctly. Beneath the left costal margin there was a large area of resistance, percussion over which was flat, and pressure over which produced pain. The exact outlines of this area were not distinctly made out because it was confused with the physical signs of the surrounding organs. Various diagnoses were suggested, among them being possible cancer of the splenic flexure with an involved omentum; a tumor of the spleen itself, the movable mass being possibly not spleen; a cyst of the mesentery, or a tumor of the kidney or connected with the pancreas. The patient's temperature, pulse and blood findings were all normal, thus excluding any suppurating process. The urine, gastric contents and fæces were also normal.

An exploratory operation was advised and done on Aug. 28,

1908. Under gas and ether anæsthesia a longitudinal incision was made near the outer border of the left rectus, just above the umbilicus. On opening the peritoneum, the exploring finger encountered the spleen in the position of the movable tumor above described. It was larger than normal, but otherwise showed no pathological change. The hand was then passed up under the left costal border and encountered a cystic tumor nearly as large as the adult head, occupying the vault of the diaphragm, and being closely packed in the costodiaphragmatic concavity, so that it protruded very little, if any, below the costal margin. Its growth had crowded the spleen toward the mid-line, and the splenic pedicle had sufficiently stretched to allow its great mobility. The wall of the cyst was of a dark purplish color, and it could not be ascertained whether it was covered with peritoneum or not. It was very slightly adherent to the diaphragm and to the anterior parietes, and could be easily separated from its surroundings. On its upper external and anterior surfaces toward the mid-line, however, it was adherent to the structures on the anterior aspect of the vertebral column, where large vessels could be seen running across it. It was remarkedly free from adhesions to any part of the alimentary tract. The stomach, the colon and the coils of small intestines were easily pushed out of the way, toward the right. The kidney lay below the cyst, and was not adherent to it. The cyst was then partly delivered and tapped; the contents (about three quarts in amount) consisted of a dark reddish-black fluid, with some thick masses of red fibrin which had the appearance of being digested. This suggested the diagnosis of a hemorrhagic cyst of the pancreas, with partial digestment of the contents. This diagnosis was further confirmed when it was found that the pedicle of the cyst lay on the tail of the pancreas. As much of the cyst wall as possible was caught in a large clamp, and the distal portion cut away. Releasing the clamp showed no tendency to any serious hemorrhage, the wall having a very poor blood supply. This procedure was repeated several times, removing the cyst piece-meal until a very small portion of it remained attached to the deep structures overlying the vertebral column. At this point large vessels were seen coursing over the remaining portion of the cyst, so that it was deemed inadvisable to attempt its further removal. The remaining portion of the cyst cavity (3 or 4 inches in circumference) was cauterized with carbolic

acid and alcohol, its cut edge being drawn as near as possible to the centre of the abdominal parietes by a large clamp, and its cavity packed with gauze. The time of operation was slightly less than an hour, and the patient's condition at the close of it was good.

During the day following the operation there was a moderate amount of discharge, and no evidence of other than a local reaction. The temperature was elevated to 104, and the pulse to 120 or more, but both promptly fell to normal by removing the packing. The wound was drained for about three weeks, when it was allowed to close. The patient was discharged on Sept. 18, with the wound entirely healed, and her general condition improving.

Examination of the patient at the present time showed that the spleen had become reduced to its normal size, and was now barely palpable below the costal margin and only slightly movable. There was no evidence of any recurrence of the cyst.

Pathological Report by Dr. Charles Norris.—The specimen consists of a cyst, the outer surface of which is covered by a glistening membrane, upon which are the remains of fine fibrous adhesions and small blood-vessels. The cyst is roughly globular in shape, and shows a few nodular protuberances. The wall, in its thinner portions, measures about 1 or 2 mm. in thickness. At one point there is a sacculated diverticulum, about as large as a plum. The inner surface of the cyst is uneven and granular, and adherent to it on all sides is a small amount of chocolate-colored blood clot. On section, the cyst wall has a laminated, fibrous appearance, save in the region of the diverticulum, where there are yellowish areas resembling the cortex of the adrenal in appearance.

Sections were taken for examination, from various parts of the cyst wall. Microscopically, these sections from the various parts all show small islands of adrenal tissue. The wall in the main is made up of fibrous tissue, with some fat, the fibrous tissue forming a layer on the outside, within which are the areas of adrenal tissue, and within this, hemorrhagic areas. In the diverticulum mentioned, smaller hemorrhagic cysts are present, of the same general construction as the larger cyst, and the pale areas in the diverticulum are found to be made up of adrenal cortex cells.

From these findings, it is probable that instead of being originally a hemorrhage into the adrenal, with organization, this

case is rather one of original cyst formation of the adrenal, into which hemorrhage has later taken place. This is particularly well seen from the microscopic study of the smaller cysts, which, as said, show the same general structure as the main cyst.

Report of the Contents of the Cyst by Dr. Hastings.—The fluid from the cyst consists of serous fluid, dark reddish-brown in color, containing a small amount of grumous material suggesting pancreatic cyst-fluid in appearance. It contained none of the pancreatic ferments and no evidence of any proteolytic ferment.

Diagnosis.—Hemorrhagic cystic fluid; origin not known, but not from pancreas.

LOCALIZED CEREBRAL TRAUMA; ASTEREOGNOSIS.

Dr. Hartwell presented a man, 22 years old, who was admitted to Dr. Eliot's service at the Presbyterian Hospital on October 13, 1908, with a history of having received a trauma of the head immediately before admission. He was struck on the left side of the head, over the parietal bone, with a brick hurled by another person from a distance of a few feet only. He was unconscious for some time after he was brought to the hospital, and was vomiting. He had no headache nor vertigo when he regained consciousness, but complained of a pain over the wound. He had sensations of pins and needles from the right shoulder down to the hand, where it was most marked, especially along the ulnar border.

Physical Examination.—Patient was seen in the accident ward. Over the left parietal region was a ragged, lacerated, deep scalp-wound, about 2 inches long, in the bottom of which could be felt an edge of bone indicating a depression about ¼ inch deep. There was no bleeding from the nose; no sub-conjunctival hemorrhage. Pupils were equal and active. Patient was perfectly rational; had some headache, and vomited once in the ward. Lungs and heart negative. Pulse 84, regular; tension normal. Careful examination of right hand shows a condition of astereognosis confined to the hand, but much more marked over the ulnar distribution. There was no apparent abnormality in pain, tactile or temperature sense. He says the reason he cannot distinguish the shape of an object is, that when he tries to feel of it, there is so much prickling that he cannot distinguish the real object from the general pin and needle sensation. The prickling sensation

extends to a diminishing extent above the elbow. There is no evidence of injury of peripheral nerves in the arm.

Operation.—Three hours after admission, under chloroform anæsthesia. Exploratory craniotomy. Elevation of depressed fragment, with removal. Position, dorsal, with head of table elevated.

Procedure.—Scalp elevated in left parietal region, the wound being enlarged anteriorly and posteriorly to about 4 inches in a somewhat curved fashion, the convexity of the incision pointing inward. The periosteum was incised along this line. Fragments of depressed bone removed and elevated. The dura was then opened for exploration and electrical test. Dura was then re-sutured, and a cigarette-drain inserted at the posterior angle of the wound, and the scalp sutured.

Findings.—A depressed fragment of bone about 1 inch in diameter, of more or less ovoid shape, with the inner table ¾ inch in diameter separated and forced against the dura. No extra-dural hemorrhage. The dura was opened because there was no pulsation, but no intradural hemorrhage was found. The brain itself pulsated normally. The area of brain exposed did not respond to stimulation by faradic current as evidenced by any motor activity in the right arm or leg. There seemed to be some excess of fluid between the dura and pia, suggesting traumatic brain œdema. Patient made good recovery after operation. Wounds healed by first intention, except at the site of the drain.

The *following notes* were made on Oct. 18.—Condition of astereognosis is still present, though less marked. The disability is much more noticeable in the distribution of the ulnar nerve than in the median. It decreases toward the elbow. Tactile sensation, as tested by the distinction of two points, is slightly less acute than on the left side. Temperature and pain senses are normal. The muscular sense is impaired in all the fingers and thumb. He is unable to state accurately the changes in position of different fingers when brought about passively, but he has no difficulty in placing them in any desired position with his eyes closed, by active effort. There is no loss of muscular power, and he is able to produce a given amount of pressure at will.

Oct. 25, 1908: The condition in last note has gradually, though not completely, subsided. An accurate measurement of the skull shows that the depression lies directly behind the